

JOHN D. POFFENBERGER  
BRUCE TITTEL  
DONALD F. FREI  
DAVID J. JOSEPHIC  
A. RALPH NAVARO, JR.  
DAVID S. STALLARD  
J. ROBERT CHAMBERS  
GREGORY J. LUNN  
KURT L. GROSSMAN  
CLEMENT H. LUKEN, JR.  
THOMAS J. BURGER  
GREGORY F. AHRENS

JOSEPH R. JORDAN  
WAYNE L. JACOBS  
KURT A. SUMME  
KEITH R. HAUPT  
C. RICHARD EBY  
THEODORE R. REMAKLUS  
THOMAS W. HUMPHREY  
DAVID E. PRITCHARD  
DAVID H. BRINKMAN  
DONALD M. HILL, JR.  
STEPHEN W. BARNES  
J. DWIGHT POFFENBERGER, JR.  
BEVERLY L. LYMAN, Ph.D.

**WOOD, HERRON & EVANS, L.L.P.**  
2700 Carew Tower  
Cincinnati, Ohio 45202-2917  
(513) 241-2324

**FAX (513) 421-7269**

**PATENT, TRADEMARK, COPYRIGHT  
AND UNFAIR COMPETITION LAW  
AND RELATED LITIGATION**

EDMUND P. WOOD  
1923-1968  
TRUMAN A. HERRON  
1935-1976  
EDWARD B. EVANS  
1936-1971

OF COUNSEL  
HERBERT C. BRINKMAN  
RICHARD H. EVANS

TRADEMARK AND INT'L  
PATENT ADMINISTRATION  
KATHRYN P. EVANS  
STAFF ATTORNEY

**FACSIMILE COVER SHEET**

If transmission is interrupted or of poor  
quality, please notify us immediately by  
calling 513 \ 241-2324.  
Ask for sender's secretary.

FAXED COPY RECEIVED

FEB 11 1997

GROUP 3200

**TO: Examiner Dave Ghatt**

**Fax No.: (703) 308-2864**

**Pages (including cover page): 11**

**Date: February 11, 1997**

**FROM: David E. Pritchard, Esq.**

**Re: Application Serial No. 08/480,836**

**Title: Temporary Implant for Use as an Anchor in the Mouth**

**Enclosed for your reference for our upcoming telephone conference on  
Thursday, February 13, 1997 at 10:00 a.m. is the following:**

- 1. Proposed Claims (For Discussion Purposes Only);**
- 2. Proposed Drawings; and**
- 3. Reference *Rybicki et al.*, U.S. Patent No. 4,011,602.**

The information in this facsimile message is  
**ATTORNEY-CLIENT PRIVILEGED, WORK PRODUCT and/or CONFIDENTIAL INFORMATION**  
intended only for the use of the individual or entity to whom this fax is addressed. If the reader of this  
message is not the intended recipient or the employee or agent responsible for delivering it to the  
intended recipient, you are hereby notified that any dissemination, distribution or reproduction of this  
communication is strictly prohibited. If you have received this communication in error, please  
immediately notify us by telephone and return the original message to us at the above address via  
United States Postal Service. Thank you.

**PROPOSED CLAIMS**  
**(For Discussion Purposes Only)**

38. (New) An implant for use as an anchor in the mouth in creating a stabilizing or moving force, comprising:

An elongated body having an in-bone portion connected to an above-bone portion, said in-bone portion and said above-bone portion each having an inner end and an outer end, the cross-sectional area of said above-bone portion inner end being greater than the cross-sectional area of said in-bone portion outer end, thereby forming a shoulder having a bone-contacting surface on said above-bone portion inner end capable of resting on a part of the bone surface adjacent to an opening in the bone when said implant is positioned in the mouth;

Said elongated body further including a securing section for attaching an orthodontic appliance to said elongated body.

39. (New) An implant for use as an anchor in the mouth in creating a stabilizing or moving force, comprising:

An elongated body having an in-bone portion connected to an above-bone portion, said in-bone portion and said above-bone portion each having an inner end and an outer end, the cross-sectional area of said above-bone portion inner end being greater than the cross-sectional area of said in-bone portion outer end, thereby forming a shoulder having a bone-contacting surface on said above-bone portion inner end capable of resting on a part of the bone surface adjacent to an opening in the bone when said implant is positioned in the mouth;

Said implant further including an integrally formed orthodontic appliance extending from said above-bone portion of said elongated body.

40. (New) An implant for use as an anchor in the mouth in creating a stabilizing or moving force, comprising:

An elongated body having an inner end, an outer end, an intermediate portion disposed between said inner and outer ends, and a securing section for attaching an orthodontic appliance to said elongated body, said intermediate portion having an outer circumferential surface including a plurality of annular ridges for providing a mechanical retentive force when said implant is positioned in an opening in a bone surface within the mouth.

41. (New) An implant for use as an anchor in the mouth in creating a stabilizing or moving force, comprising:

An elongated body having an inner end, an outer end, a securing section for attaching an orthodontic appliance to said implant, and a retention portion for assisting in securing said implant within an opening in a bone surface in the mouth;

Said retention portion including a section of the elongated body extending from one of said inner end and said outer end at least part-way toward the other of said inner end and said outer end, said retention portion further including a tapered bore and at least one longitudinal cut, said tapered bore and said longitudinal cut extending from said one of said inner and outer ends with said tapered bore having a cross-sectional area which gets smaller in the direction of said inner end, whereby when said implant is positioned in an opening in a bone surface of the mouth, and an orthodontic appliance having a corresponding fastening section is attached to said elongated body, a portion of the fastening section biases against a portion of the sidewall of said tapered bore

and moves said retention portion radially outward thereby securing said implant in the opening in the bone surface.

42. (New) An implant for use as an anchor in the mouth in creating a stabilizing or moving force, comprising:

An elongated body having an inner end, an outer end, a securing section for attaching an orthodontic appliance to said implant, and a retention portion for assisting in securing said implant within an opening in a bone surface in the mouth,

Said retention portion including a section of the elongated body extending from one of said inner end and said outer end at least part-way toward the other of said inner end and said outer end, said retention portion being formed of a shape-memory alloy and including a bore and at least two longitudinal cuts, said bore and said longitudinal cuts extending from said one of said inner end and said outer end at least part-way toward said other of said inner end and said outer end, said longitudinal cuts forming at least two leg portions, said retention portion capable of assuming a predetermined shape in which said leg portions angle slightly radially outward when said retention portion reaches an ambient mouth temperature, thereby securing said implant in an opening in a bone surface in the mouth.

43. (New) An implant for use as an anchor in the mouth in creating a stabilizing or moving force, comprising:

An elongated body having an inner end, an outer end, an intermediate portion disposed between said inner and outer ends, and a securing section for attaching an orthodontic appliance to said elongated body, said elongated body being formed of a bioresorbable material. ✓

44. (New) An implant for use as an anchor in the mouth in creating a stabilizing or moving force, comprising:

An elongated body having an inner end, an outer end, an intermediate portion disposed between said inner and outer ends, and a securing section for attaching an orthodontic appliance to said elongated body, said intermediate portion having an outer circumferential surface including an osteoinductive factor.

45. (New) An implant for use as an anchor in the mouth in creating a stabilizing or moving force, comprising:

An elongated body having an inner end, an outer end, an intermediate portion disposed between said inner and outer ends, and a securing section for attaching an orthodontic appliance to said elongated body, said intermediate portion having an outer circumferential surface including an infection-inhibiting coating.

46. (New) An anchorage system for use in creating a stabilizing or moving force in the mouth, comprising:

An onplant having a bone-facing surface, an opposite face, and a hole extending through said onplant at an angle substantially perpendicular to said bone-facing surface; and

An implant for use in affixing said onplant to a bone surface in the mouth, said implant having an elongated body including an inner end and an outer end, said inner end and a portion of said elongated body capable of being positioned through said hole and in an opening in a bone surface in the mouth.

47. (New) A method of forming an anchor in a non-occlusal surface of the mouth for use in creating a stabilizing or moving force, comprising the steps of:  
providing an implant having an elongated body which includes an inner end, an outer end, an outer circumferential surface between said inner and outer ends, and a securing section for attaching an orthodontic appliance to said elongated body; and  
positioning at least a part of said elongated body, including said inner end, in an opening in a bone surface selected from the group consisting of the buccal, labial, lingual and palatal surfaces of the maxillary jawbone and the buccal, labial and lingual surfaces of the mandibular jawbone, thereby forming an anchor in a non-occlusal surface of the mouth for use in creating a stabilizing or moving force.

48. (New) A method of forming an anchor in a non-occlusal surface of the mouth for use in creating a stabilizing or moving force, comprising the steps of:  
providing an implant having an elongated body and an integrally formed orthodontic appliance, said elongated body including an inner end and an outer end; and  
positioning at least a part of said elongated body, including said inner end, in an opening in a bone surface selected from the group consisting of the buccal, labial, lingual and palatal surfaces of the maxillary jawbone and the buccal, labial and lingual surfaces of the mandibular jawbone, thereby forming an anchor in a non-occlusal surface of the mouth for use in creating a stabilizing or moving force.

49. (New) A method of forming an anchorage system in the mouth for use in creating a stabilizing or moving force, comprising the steps of:  
Placing an onplant on a bone surface in the mouth selected from the group consisting of the buccal, labial, lingual and palatal surfaces of the maxillary jawbone and the buccal, labial and lingual surfaces of the mandibular jawbone, said onplant having a bone-facing surface, an opposite face, and a hole extending through said onplant at an angle substantially perpendicular to said bone-facing surface; and  
Positioning a portion of an implant through said hole in said onplant and in an opening in said bone surface thereby affixing said onplant to said bone surface, said implant having an elongated body including an inner end and an outer end.